



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,320	03/26/2001	Barry Lynn Royer	2001P04781US	8856
7590	03/09/2006		EXAMINER	
Siemens Corporation Intellectual Property Department 186 Wood Avenue South Iselin, NJ 08830			DAVIS, ZACHARY A	
			ART UNIT	PAPER NUMBER
			2137	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/817,320	ROYER ET AL.
Examiner	Art Unit	
Zachary A. Davis	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 14 December 2005.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-22 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20060119.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## **DETAILED ACTION**

1. A reply under 37 CFR 1.116 was received on 22 June 2005. By that reply, Claims 1, 12, and 13 were amended. No claims have been added or canceled. A Notice of Appeal was received on 15 August 2005. An Appeal Brief was received on 12 October 2005 and a supplemental Appeal Brief was received on 14 December 2005. Claims 1-22 are currently pending in the present application.

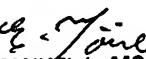
### ***Response to Arguments***

2. In view of the supplemental Appeal Brief filed on 14 December 2005, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER

***Information Disclosure Statement***

3. The information disclosure statement received 19 January 2006 was received during the period set forth in 37 CFR 1.97(d) (i.e. after the mailing date of a final rejection). Applicant has paid the fee as required in 37 CFR 1.97(d)(2) but has not provided a statement under 37 CFR 1.97(e) as required by 37 CFR 1.97(d)(1). However, because prosecution is herein reopened, the Examiner has considered the above information disclosure statement as though it were filed under 37 CFR 1.97(c).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 5, 7-12, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calamera et al, US Patent 6463533, in view of Payne et al, US Patent 5715314.

In reference to Claim 1, Calamera discloses a system including a link processor that identifies and encrypts the address portion of a URL (DOMAIN and PATH of column 8, lines 43-48) and incorporates the encrypted address portion with the non-encrypted portion into a single processed URL data string and a communication processor that incorporates the processed URL data string into formatted data for communication to a destination system (ALIAS of column 8, lines 58-60). However, although Calamera discloses providing a decryption key to a server system (column 9, lines 20-26), Calamera does not explicitly disclose providing the decryption key to the destination system.

Payne discloses a system including a link processor that encrypts various portions of a URL and incorporates the encrypted portion with a non-encrypted portion into a single processed URL (for example, column 5, lines 30-47) and that further provides a decryption key to a destination system (for example, column 5, lines 44-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Calamera to include the provision of a decryption key to the destination system, in order to increase integrity by allowing the recipient to verify that the encrypted URL is correct (see Payne, column 1, line 64-column 2, line 2; see also column 5, lines 57-60 and column 7, lines 33-36).

In reference to Claims 2 and 3, Calamera and Payne further disclose adaptively identifying the address portion as lying between "http://" and either a question mark or pound sign (Calamera, column 8, lines 43-48, where the address portion is only the domain and path of the URL and nothing further).

In reference to Claims 5, 7, and 12, Calamera and Payne further disclose compressing the address portion of the URL prior to encryption, where the address portion is encoded with MD5 (see Calamera, column 8, lines 48-50, where the hash function is MD5; see also Payne, column 5, lines 44-47).

In reference to Claim 6, Calamera and Payne disclose everything as applied to Claim 5 above. However, neither Calamera nor Payne explicitly discloses converting the address portion to lower case before compression. Official notice is taken that it is well known that addresses within URLs can be case **insensitive**. Official notice is further taken that many hash functions, including the MD5 hash function as recited in Claim 12, by definition, are case sensitive, and will return a different result if even one input bit is changed, and certainly if a character is changed from lowercase to uppercase. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Calamera and Payne by including forcing all characters in the input of the hash function, i.e. the address portion, to lowercase, in order to insure that a comparison of hash function results will return the proper comparison result.

In reference to Claim 10, Calamera and Payne further disclose concatenating the address portion with data associated with a personal record to form a data element and

encrypting the data element (Calamera, ID at column 8, lines 56-58; Payne, column 5, lines 30-43).

In reference to Claim 11, Calamera and Payne further disclose that the personal record data is a user identifier (Calamera, ID defined at column 7, lines 56-58).

Claim 20 is directed to a method that corresponds substantially to the system of Claim 1, and is rejected by a similar rationale.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calamera in view of Payne as applied to claim 3 above, and further in view of Calow, US Patent 6714928.

Calamera and Payne disclose everything as applied to Claim 3 above; however, neither Calamera nor Payne explicitly discloses using dynamic page languages such as ASP. Calow discloses a system in which Active Server Pages or another dynamic page server can be used (column 3, lines 49-59) where parameters for the dynamic pages include server names and script names (see columns 29-32, with the table of the ASP example). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Calamera and Payne to include usage of ASP and appropriate parameters, in order to allow application software to be hosted by a user's browser (see Calow, column 2, lines 34-39).

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calamera and Payne as applied to claim 1 above, and further in view of Levergood, US Patent 5708780.

In reference to Claims 8 and 9, Calamera and Payne disclose everything as applied to Claim 1 above. Calamera and Payne further disclose a duration and expiration times (Payne, column 5, lines 37-42); however, neither Calamera nor Payne explicitly disclose incorporating a session identifier into the processed URL. Levergood discloses a system including a link processor (column 5, lines 42-65) and a processor incorporating URL data into formatted data for communication to a destination system (column 4, lines 1-6 and column 7, lines 15-21), and Levergood further discloses that a session identifier is included in a processed URL data string (column 5, lines 52-54, noting column 3, lines 12-16, where SID is a session identifier). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Calamera to include a session identifier, in order to allow authenticated access across multiple servers (see Levergood, column 6, lines 17-26).

8. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calamera in view of Levergood.

In reference to Claim 13, Calamera discloses a system including a link processor that identifies and encrypts the address portion of a URL (DOMAIN and PATH of column 8, lines 43-48) and incorporates the encrypted address portion with the non-encrypted portion into a single processed URL data string and a communication

processor that incorporates the processed URL data string into formatted data for communication to a destination system (ALIAS of column 8, lines 58-60). However, Calamera does not explicitly disclose the use of a session identifier.

Levergood discloses a system including a link processor (column 5, lines 42-65) and a processor incorporating URL data into formatted data for communication to a destination system (column 4, lines 1-6 and column 7, lines 15-21), and Levergood further discloses that a session identifier is included in a processed URL data string (column 5, lines 52-54, noting column 3, lines 12-16, where SID is a session identifier). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Calamera to include a session identifier, in order to allow authenticated access across multiple servers (see Levergood, column 6, lines 17-26).

In reference to Claim 14, Calamera and Levergood disclose everything as applied to Claim 13 above. Calamera and Levergood further disclose compressing the identified portion of the URL before encrypting the identified portion (see Calamera, column 8, lines 48-50; see Levergood, column 5, lines 61-65). However, neither Calamera nor Levergood explicitly discloses converting the address portion to lower case before compression. Official notice is taken that it is well known that addresses within URLs can be case **insensitive**. Official notice is further taken that many hash functions, including the MD5 hash function as recited in Claim 12, by definition, are case sensitive, and will return a different result if even one input bit is changed, and certainly if a character is changed from lowercase to uppercase. Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Calamera and Levergood by including forcing all characters in the input of the hash function, i.e. the address portion, to lowercase, in order to insure that a comparison of hash function results will return the proper comparison result..

9. Claims 15, 16, 18, 19, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payne in view of Calamera.

In reference to Claim 15, Payne discloses a system including an input processor receiving an encoded URL (column 5, lines 53-56), a link processor identifying an encrypted portion of the received URL and a corresponding non-encrypted portion of the URL and decrypting the encrypted portion thereby generating a decrypted URL portion, and a validation processor determining if the decrypted URL portion has been subject to unauthorized modification by determining if the decrypted portion is different from the non-encrypted portion (see column 5, lines 57-60). However, although Payne discloses that the URL includes, *inter alia*, domain identifiers and buyer network address (column 5, lines 30-43), Payne does not explicitly disclose that the URL portion is an address.

Calamera discloses a system including an input processor receiving an encoded URL (column 9, lines 20-23), a link processor identifying an encrypted address portion of the received URL and a corresponding non-encrypted address portion of the URL and decrypting the encrypted portion thereby generating a decrypted URL address portion (column 9, lines 24-26), and a validation processor determining if the decrypted

URL address portion has been subject to unauthorized modification by determining if the decrypted portion is different from the non-encrypted portion (column 9, lines 29-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Payne to explicitly include the address portions of the URLs, in order to allow tracking of the user across several application sites (see Calamera, column 2, lines 57-65).

In reference to Claim 16, Payne and Calamera further disclose that the decrypted portion is a first hash value (Payne, column 5, lines 44-47; Calamera, column 9, lines 24-26), and additionally disclose applying a hashing function to the non-encrypted portion to create a second hash value and comparing the first and second hash values, where a match determines a successful validation (Payne, column 5, line 57-column 6, line 8; Calamera, column 9, lines 26-36).

In reference to Claims 18 and 19, Payne and Calamera further disclose a personal record, specifically a user identifier, in the URL (Calamera, ID at column 8, lines 56-58 and column 7, lines 56-58; Payne, column 5, lines 30-43).

Claims 21 and 22 are directed to methods that correspond substantially to the systems of Claims 15 and 16, and are rejected by a similar rationale.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Payne in view of Calamera as applied to claim 15 above, and further in view of Levergood.

Payne and Calamera disclose everything as applied to Claim 15 above; however, neither Payne nor Calamera explicitly disclose a session identifier in the non-encrypted

portion of the URL. Levergood discloses a link processor (column 5, lines 42-65) and a validation processor determining if a decrypted URL has been subject to unauthorized modification (column 6, lines 8-16, where the SID in the URL is validated) in which the URL includes a session identifier (column 5, lines 52-54, noting column 3, lines 12-16, where SID is a session identifier). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Payne and Calamera to include a session identifier in order to authenticated access across multiple servers (see Levergood, column 6, lines 17-26).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Binding et al, US Patent 6751731, discloses a system in which encrypted parameters for establishing security may be appended to a URL request (see especially column 12).
- b. Ganesan et al, US Patent 6948063, discloses a system that protects the integrity of URLs using encryption and/or hashing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-

3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*ZAD*  
zad

*cg. moise*  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER